LOCKHEED AIRCRAFT CORPORAT	TON	ENGINEERING STUDY CHANGE PROPOSAL			], 🎊 🌓 -122			
1-16-62	AFFECTS:	WSPC	<b>x</b>	PRO.	JECT X	]		
IAME OF MAJOR COMPONENT AIRPLANE	PART OR LOWEST SU AUTOPILO		PAF	RT NO. &	MODEL C	R TYPE		
ITLE OF PROPOSAL : AUTOPILA	T HEADING SYNCHRO	ONIZER ADDI	PION					
NATURE OF PROPOSAL:		· · · · · · · · · · · · · · · · · · ·		<del> </del>				
SEE PAGE	2	•				٧ -		
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REASON FOR PROPOSAL:				;				
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SEE PAGE								
<b>*</b>				• •				
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ESTIMATED COST AND TIME								
ES ADDITIONAL FUNDING REQU	JIRED:							
ESTIMATED COST FOR KITS	OR PARTS: SEE	PAGE 2						
ADDITIONAL FUNDING REQU	JIRED: NON	E (SP-1923)						
TEMS AFFECTED BY PROPOSAL :								
SAFETY MISSION PERFORM- OPERA	TING INTER- WEIGHT		MAINTE- NANCE	SERVICE LIFE	FLIGHT MANUAL	MAINTE- NANCE		
EFFEC- TIVENESS ANCE PROCI	ABILITY BALAN		PROCEDURE		-	MANUAL		
					Lxd	x		
EST. MAN/HRS. REQ'D. TO ACCOM SOURCE OF PARTS FOR KIT	·····	AVAILABILITY	6 <sub>v</sub>	VEEKS AFT	ER APPRO	OVAL		
LAC		AND RECEIP			/ /			
DISPOSITION OF SPARES AFFECTED	AMPLIFIER P/N	114705-02R	R45 (WEPC	) AND				

SP-E-1A

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## NATURE OF PROPOSAL

- 1. The autopilot control gyro amplifier (WSPO/P/N 114705-02R345 and Project P/N 114705-02R338) will be modified by replacing the existing 976 directional gyro with a heading synchronizer. These units will be modified at LEAR and re-identified. A minimum amount of aircraft wiring will be required at the autopilot terminals in the nose area.
- 2. On four aircraft only (Serials 56-6701/368, 56-6721/388, 56-6722/389, and 56-6954/394) a stepdown transformer must be added to accomodate this autopilot modification in order to retain the additional heading reference capabilities of these four aircraft.
- 3. Prepare and issue a Service Bulletin and fabricate the necessary Kits. It will be necessary for a sufficient number of spares to be returned for modification in order to establish a turnaround schedule for Kit shipment.

## REASON FOR PROPOSAL

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To improve the autopilot's capability to fly corridor missions. After the synchronizer is installed, the autopilot will be improved as follows:

- a. Allow immediate use of autopilot (re-engagement) after use of compass fast slave. The two and one half minute time delay will be eliminated.
- b. Maintenance malfunctions will be reduced due to elimination of extra autopilot directional gyro.

## ESTIMATED COST FOR KITS OR PARTS

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	*To be initiated by and accomplished per Depot Rework Order Requests Contract SP-1923, "REPAIR OF CUSTOMER PARTS - COMMON"
STAT	There are approximately 100 ea. amplifiers in the total assets, therefore a budgetary estimate of will apply to this job. Expenditures will extend into FY 1963.
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